

What is Claimed is:

1. A method of identifying a patient at an increased risk of death from community-acquired pneumonia (CAP) associated with the A allele in a TNF $\alpha$  gene at the -308 locus in an animal, said method comprising determining the genotype of said TNF $\alpha$  gene in said animal; and identifying increased risk of death from CAP based on said genotype.

2. A method of treating patients comprising identifying a patient at an increased risk of death from community-acquired pneumonia (CAP) by identifying the A allele in a TNF $\alpha$  gene at the -308 locus in such patient; and vaccinating such patients prior to the onset of CAP with pneumococcal and/or influenza vaccination.

3. A method of screening to identify compounds which stimulate or inhibit the synthesis or action of the TNF $\alpha$  polypeptide having the A allele at the -308 site comprising screening compounds in a TNF $\alpha$  polypeptide, having the A allele at the -308 site, in an assay; and identifying those compounds which stimulate TNF as agonists and those compounds which inhibit such TNF as antagonists.

4. A agonist or antagonist identified by the method of claim 3.

5. A method of treating patients comprising identifying a patient at an increased risk of death from community-acquired pneumonia (CAP) by identifying the A allele in a TNF $\alpha$  gene at the -308 locus in such patient, and administering such patient an effective amount of an antagonist identified in claim 3 in a pharmaceutically acceptable carrier.